



Neurosurgical Forum LETTERS TO THE EDITOR

From a polemic paradox to a proper perspective of job burnout and job satisfaction

TO THE EDITOR: We read with interest Laurent and colleagues' Letter to the Editor⁴ (Laurent E, Schonfeld IS, Bianchi R: "Burned out" at work but satisfied with one's job: anatomy of a false paradox. *J Neurosurg* 129:1371–1373, November 2018) regarding the article by Attenello et al.¹ (Attenello FJ, Buchanan IA, Wen T, et al: Factors associated with burnout among US neurosurgery residents: a nationwide survey. *J Neurosurg* 129:1349–1363, November 2018) in which high prevalence in burnout and job satisfaction were simultaneously reported. Laurent et al. claim a false paradox and state that this "apparent paradox attached to Attenello and colleagues' findings is accounted for by persistently ignored problems in burnout's conceptualization and measurement."

We agree with Laurent et al. regarding the perennial problems in burnout research, particularly with the use of arbitrary cutoff points for clinical diagnostic purposes, which creates unrealistic and inadequate conclusions. However, 2 points should be reconsidered with respect to their "false paradox":

First, part of the conceptual and empirical problem of burnout is that many researchers force it into a biomedical disease model despite its being a psychosocial one, where the role of social-individual interaction in well-being and disease prevention is essential. Theoretically, alterations in psychological well-being are different from a more stable mental disease.³ Burnout has been unanimously recognized as a consequence of stress and a pathogenic mediator between job exposures and mental disease in virtually all conceptual and theoretical models.⁹ Thus, a measure of burnout should not have "clinical underpinning," "clinical validity," or be used to "diagnose a case," as the authors expect and medical epidemiologists do in the actual research. It should rather be used to capture the variability of exhaustion and cynicism resulting from work, as a secondary prevention screening effort. Furthermore, it seems that Laurent et al.⁴ are confusing phenomenon and construct. The Maslach Burnout Inventory (MBI) is not "burnout." Alternative instruments with bet-

ter performance have been widely used in Spanish.² The unquestionable problems of burnout measures or their misuse are different from the construct itself, as when "the sword is confounded with the hand" in psychometric research.⁷

Second, all critiques by Laurent et al. were focused entirely on burnout. However, job satisfaction research is plagued with definitional and methodological issues,⁸ and methodological vulnerabilities in job satisfaction measurement are present in Attenello and colleagues' study. These methodological vulnerabilities include social desirability bias, acquiescence or other idiosyncratic answer patterns, use of arbitrary cutoff points, self-selection bias, and the use of a single item, which causes loss of information and problems with reliability and content validity (given the multidimensionality of the construct)—all of which call into question the high prevalence of satisfaction reported in the study. Furthermore, if valid, job satisfaction commonly shows very high prevalence in different nations,¹⁰ even in jobs with high precariousness in developing countries.⁶ This contradiction has been explained by the aspirational paradox,⁵ in which people overstate minor positive aspects of their work due to the limited prospects in the current global market. Such an idea is consistent with the objective working conditions reported by neurosurgeons in Attenello and colleagues' study. Thus, job satisfaction could be also a sort of adaptation effort under adverse working conditions, a coping strategy to attenuate work that has high demands and low rewards, or an optimistic view in the midst of difficulties but, nonetheless, not the exact opposite of burnout.

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Response

Juárez García and colleagues commented on a Letter to the Editor in which we discussed the limitations of the interpretations of a study on burnout among US neurosurgery residents. In our analysis of Attenello and colleagues’ article, we stressed that 1) using arbitrary cutoff scores to identify “burned out” individuals can lead to the inclusion of large numbers of individuals who only experience normal mood fluctuations and 2) “many individuals reporting burnout symptoms may simultaneously be satisfied with their job for the basic reason that their symptoms are not caused by work-related difficulties.”

In their correspondence regarding our comments, Juárez García and colleagues made 3 points.

First, they recognized that “the use of arbitrary cutoff

points for clinical diagnostic purposes ... creates unrealistic and inadequate conclusions.”

Second, the authors considered that “part of the conceptual and empirical problem of burnout is that many researchers force it into a biomedical disease model despite its being a psychosocial one.” Problematically, these authors’ scholastic argument a priori excludes biological or bodily factors from psychological conceptualizations. Scientists usually face considerable difficulties when trying to describe complex processes. If the understanding of biological processes sheds light on the complex processes that bear on burnout, then there is no reason to exclude research on those processes. We have long lamented the tendency of burnout researchers to endorse restrictive, socially biased views of burnout without regard for biology and history of disorders. Juárez García and colleagues’ line of reasoning reflects such a tendency. Instead of rejecting the findings of biological research, we should develop a complexity-oriented approach to burnout and other depressive conditions that integrates various levels of observation (e.g., biological, psychological, and social).³ There is a need to recognize that cognitive or “affective” processes in burnout are both socially situated *and* biologically embodied—it clearly makes no sense to consider that some subjective processes, such as exhaustion or de-personalization, are merely “psychosocial” by fiat without considering other individual factors.¹

Third, the authors complained about the potential weakness of Attenello and colleagues’ single-item measure of job satisfaction, which could explain why participants categorized as “burned out” could have reported being satisfied with their work. Though we did not deal with these questions in our previous correspondence, we note that the use of single items has been found to be largely acceptable in various research areas, such as the research areas pertaining to job satisfaction,⁴ quality of life,⁵ and mortality risk:² “The use of single-item measures should not be considered fatal flaws in the review process.”⁴ Moreover, investigators who draw opposite conclusions (by stating, for instance, that participants would overstate minor positive aspects of work) to what self-reports straightforwardly point out (i.e., job satisfaction) should be prepared to defend such a view with supportive evidence, not with unsupported claims.

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